

Title (en)

Apparatus for producing three-dimensional work pieces by additive layer manufacturing method which comprises a drying device

Title (de)

Vorrichtung zur Herstellung von 3D-Werkstücken durch schichtweises Aufbauverfahren mit einer Trockenvorrichtung

Title (fr)

Appareil de fabrication de pièces 3D par une méthode de fabrication additive comportant un dispositif de séchage

Publication

**EP 2992986 A1 20160309 (EN)**

Application

**EP 14183417 A 20140903**

Priority

EP 14183417 A 20140903

Abstract (en)

An apparatus (10) for producing three-dimensional work pieces comprises a process chamber (12) accommodating a carrier (16) and a powder application device (14) for applying a raw material powder onto the carrier (16). The apparatus (10) further is equipped with an irradiation device (18) for selectively irradiating electromagnetic or particle radiation onto the raw material powder applied onto the carrier (16) in order to produce a work piece made of said raw material powder by an additive layer construction method. A gas circuit (34) comprises a circulation line (36) adapted to supply gas to the process chamber (12) and to discharge gas loaded with particulate impurities from the process chamber (12), and a raw material powder circuit (42) comprises a circulation line (44) adapted to supply raw material powder to the process chamber (12) and to discharge excess raw material powder from the process chamber (12). A drying device (58, 60) which contains a drying agent is arranged in at least one of the gas circuit (34) and the raw material powder circuit (42).

IPC 8 full level

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CPC (source: EP US)

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Citation (applicant)

EP 1793979 B1 20090211 - MTT TECHNOLOGIES GMBH [DE], et al

Citation (search report)

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- [Y] DE 102011088158 A1 20130613 - BAYERISCHE MOTOREN WERKE AG [DE]
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- [A] DE 102009040582 A1 20110310 - HEILAND CHRISTOPH [DE]
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